

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Monsanto Jechnology XXÇ

MUCCUS, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITIORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT R PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR RENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84)

SOYBEAN

'SN74232'

In Testimonn Marrest, I have hereunto set my hand and caused the seal of the Plant Bariety Arotection Office to be affixed at the City of Washington, D.C. this nineteenth day of September, in the year two thousand and three.

Mark Hermelin

Plant Variety Protection Office Agricultural Marketing Service U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7.U.S.C. 2421). Information is held confidential until certificate is issued (7.U.S.C. 2426).

NAME OF OWNER Monsanto		2. TEMPORARY DESIGNATE EXPERIMENTAL NAME CAK2701F0R	ION OR	3. VARIETY NAME SN74232				
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 634 E. Lincoln Way				5. TELEPHONE (include area code) (515) 232-7170		FOR OFFICIAL USE ONLY		
						PVPO NUMBER		
Ames, IA	50010		**************************************	6. FAX (include area code)		00300118		
				(515) 232-690)5	FILING DATE		
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) 8. IF INCORP STATE OF			RPORATED, GIVE OF INCORPORATION	ATED, GIVE 9. DATE OF INCORPORAT		2/4/2003		
Limited Liability	Company					***************************************		
Donald Steffen 634 E. Lincoln W Ames, IA 50010	/ay	IIS APPLICATIO	NN. (First person listed will re	ceive all papers)	Management of the control of the con	Filing and examination FEES: \$ 2,705.00 DATE 2/4/2003 CERTIFICATION FEE: \$ 432.00		
					I	DATE 9/(2/2003		
11. TELEPHONE (Include area code)	12. FAX (Include area code)	"	3. E-MAIL	D=====================================	14. CROP	KIND (Common Name)		
(515) 956-3002	(515) 232-6905		donald.e.steffen@	<i>y</i> monsanto.com		Soybean		
15. GENUS AND SPECIES NAME OF CROI		16	16. FAMILY NAME (Botanical) 17. IS THE VARIETY A FIRST GENER HYBRID?					
Glycine max (L.) M	lerr.		Fabaceae (Leg	guminosae)		YES NO		
 18. CHECK APPROPRIATE BOX FOR EACH reverse) a. Exhibit A. Origin and Breeding b. Exhibit B. Statement of Disting c. Exhibit C. Objective Description d. Exhibit D. Additional Description 	g History of the Variety ctness on of Variety ion of the Variety <i>(Optional)</i>	v instructions on	CERTIFIED : YES 20. DOES THE O VARIFTY RF		of THIS	NO (If "no," go to item 22) YES NO REGISTERED CERTIFIED		
f. Voucher Sample (2,500 viable verification that tissue culture verpository)	untreated seeds or, for tuber propagat will be deposited and maintained in an a 2,705), made payable to "Treasurer of ty Protection Office)	approved public	LIMITED AS 1 IF YES, SPEC NUMBER 1, 2		IS?	YES NO REGISTERED CERTIFIED e indicated on the reverse.)		
22. HAS THE VARIETY (INCLUDING ANY H FROM THIS VARIETY BEEN SOLD, DIS OTHER COUNTRIES?				ETY OR ANY COMPONENT OF RIGHT <i>(PLANT BREEDER'S RI</i>		Y PROTECTED BY INTELLECTUAL ENT)?		
YES	™ NO			✓ YES □ NO				
IF YES, YOU MUST PROVIDE THE DAT FOR EACH COUNTRY AND THE CIRCL	TE OF FIRST SALE, DISPOSITION, TF JMSTANCES. <i>(Please use space indic</i>	RANSFER, OR t cated on reverse	USE IF YES, GIVE (e.) REFERENCE	COUNTRY, DATE OF FILING ON NUMBER. (Please use space in the space in t	OR ISSUANCE ndicated on re	E AND ASSIGNED everse.)		
24. The owners declare that a viable sample for a tuber propagated variety a tissue cu The undersigned owner(s) is(are) the own and is entitled to protection under the pro Owner(s) is(are) informed that false repre	ner of this sexually reproduced or tuber visions of Section 42 of the Plant Varie	r propagated pla ety Protection Ac	ant variety, and believe(s) th					
SIGNATURE OF OWNER			SIGNATURE OF C	DWNER				
IAME (Please print or type) Donald Steffen			NAME (Please prin	nt or type)				
CAPACITY OR TITLE Oilseeds IP/Reg. Affairs	Manager DATE	n 2003	CAPACITY OR TI	rle · · ·		DATE		

ENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,705 (\$320 filling fee and \$2,385 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$320 for issuance of the certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvp.htm

ITEM

18a. Give:

- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication:
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety's most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C-forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 21. See Section 83 of the Act for the Contents and Term of Plant Variety Protection.
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)
- 23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)
- U.S. Patent No. 5,776,760. Issue Date: July 7, 1998. Assignee: Monsanto Company. Patent Application No. 484,274.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed collarly debages of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center--East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/lsg/seed//s-sd.htm

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average I.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, cotor, national origin, gender, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA'S TARGET Center at 202-720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

S&T-470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (02-99) which is obsolete

15

MONSANTO TECHNOLGY LLC PVP APPLICATION - SN74232

EXHIBIT A

ORIGIN AND BREEDING HISTORY

1997 - Final cross was made in 1998 at Ames, Iowa.

Parentage: A2553/AG2903

Source of glyphosate tolerance is AG2903 = ST2250/4/A4539/3/A3431*2//A3242/40-3-2.

- 1997 F1 generation was grown at Isabela, Puerto Rico and advanced using modified single seed descent.
- 1998 F2 generation was grown at Isabela, Puerto Rico and advanced using modified single seed descent.
- 1998 F3 bulk populations were grown at Ames, Iowa and single plants pulled.
- 1999 F3 derived F4 plants were grown at Rancagua, Chile in progeny rows and variety SN74232 was selected. ((Selections were made based on plants' reaction to glyphosate applications) per applicant's pequestible: 7/16/2003).
- 1999 F3:5 breeder seed was grown at Ames, Iowa for progeny row increase and in yield tests at 4 location in Iowa.

Variety SN74232 was observed to be uniform and stable for the characteristics described within this application based on our observations since 1999 and, henceforth, to present. No variants were observed during this time.

Variety SN74232 has continued to be grown in yield tests at 12 locations in 2000 and 29 locations in 2001 for comparison against other varieties to determine how it would be used in our marketing program.

MONSANTO TECHNOLGY LLC PVP APPLICATION - SN74232

EXHIBIT B

NOVELTY STATEMENT

To our knowledge, the soybean varieties that closely resemble SN74232 are SN71173, and SN82691:

1. Pod Wall color	SN74232	- Brown
	SN71173	- Tan
·	SN82691	- Tan
2. SCN Resistance	SN74232	- Resistant to Race 3
	SN71173	- Susceptible
	SN82691	- Susceptible
3. PRR Gene	SN74232	- Rps1c
(Tolerance to Phytophthora Root Rot)	SN71173	- Rps1k
,	SN82691	- Rps1k

Form Approved - OMB No. 0581-0055

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705 EXHIBIT C (Soybean)

OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycine max (L.) Merr.)

NAME OF APPLICANT(S)	Monsanto Technology		FOR OFFICIAL USE ONLY	
ADDRESS (Street and No. or R.)			PVPO.NUM2ED 03 0 0 1 18	
	634 E. Lincoln Way Ames, IA 50010			VARIETY NAME SN74232
				TEMPORARY OR EXPERIMENTAL DESIGNATION CAK2701F0R
PLEASE READ ALL INSTR	RUCTIONS CAREFULLY: Place the ap	ppropriate number that descri	oes the varietal character of	this variety in the boxes below.
Place a zero in the first box (e	a.g. 099 or 09) when nur	mber is either 99 or less or 9 o	less respectively. Data for o	quantitative
plant characters should be ba	sed on a minimum of 100 plants. Com	parative data should be detern	nined from varieties entered	in the same trial. Royal
Horticultural Society or any 1	ecognized color standard may be used t	o determine plant colors; desig	mate system used:	
	r your variety; lack of response may de	lay progress of your applicatio	n.	
A. MORPHOLOGY	•	•		
Seed Shape:				
3 = Elon	T, and T/W ratios < 1.2)	(L/W ratio 4 = Elonga	cal-Flattened > 1.2; L/T ratio < te-Flattened > 1.2;T/W ratio >	
Seed Coat Color:			·	
1 1 = Yello	w 2 = Green	3 = Brown	4 = Black	5 = Other (Please Specify)
Seed Coat Luster:				
1 1 = Dull	2 = Shiny			
Seed Size:			*	
1 5 . 5 g	rams/100 seeds			
Hilum Color:		$\sigma_{2} \simeq 0.000$		
6 1 = Buff 6 = Black	2 = Yellow 7 = Other (Please)	3 = Brown use Specify)	4 = Gray	5 = Imperfect Black
Cotyledon Color:				
1 = Yello	w 2 = Green			

A. MORPHOLOGY (Continued)

Seed Protein Peroxidase Activity:

$$1 = Low$$

$$2 = High$$

200300118

Hypocotyl Color:

4 = Dark Purple extending to unifoliolate leaves ('Hodgson', 'Coker', or 'Hampton 266A')

Leaf Shape:

$$3 = Ovate$$

Flower Color:

Pod Color:

$$2 = Brown$$

$$3 = Black$$

Pubescence Color:

$$2 = Brown (Tawny)$$

Plant Habit:

$$3 = Indeterminate$$

Maturity Group:

$$\begin{array}{c} 2 = 00 \\ 7 = IV \end{array}$$

$$3 = 0$$
$$8 = V$$

$$4 = I$$
$$9 = VI$$

$$5 = II$$

$$10 = VI$$

$$7 = IV$$
$$12 = IX$$

$$8 = V$$
$$13 = X$$

$$9 = VI$$
$$14 = XI$$

$$10 = VII$$
$$15 = XII$$

Maturity Subgroup:

Please enter a value from 0 - 9

B. DISEASE REACTIONS

$$0 = Not Tested$$

$$2 = Resistant 3 = Tolerant$$

Bacterial

- Bacterial Pustule (Xanthomonas campestris pv. glycines (Nakano) Dye)
- Bacterial Blight (Pseudomonas syringae pv. glycinea (Coerper) Young, Dye, & Wilkie)
- Wildfire Blight (Pseudomonas syringae pv. tabaci (Wolf & Foster) Young, Dye, & Wilkie)

Fungal

	Frogeye Leaf Spot (Cer	cospora sojin	a Hara)				200	3 0	_0	116
0	race 1	0	race 2		0	race 3		0		race 4
0	race 5	0	race 6			Other (Ple	ase Specify	v)		
0	Target Spot (Corynespo.	ra cassiicola ((Berk. & Curt.)	Wei)						
0	Downey Mildew (Perone	ospora trifolio	rum var. manc	<i>hurica</i> (Na	um.) S	yd. ex Gäu	n)			
0	Powdery Mildew (Micro	osphaera diffu	sa Cke. & Pk.)							•
2	Brown Stem Rot (Phialo	phora gregat	a (Allington & (Chamberla	in) W.	Gams.)				
0	Stem Canker (Diaporthe	phaseolorun	(Cke. & Ell.) S	Sacc. var. o	caulivoi	ra Athow &	Caldwell)			
0	Pod and Stem Blight (Da	iaporthe phas	eolorum (Cke. &	& Ell.) Sac	c. var.	<i>sojae</i> (Lehn	nan) Wehr	n.)		e ee
0	Purple Seed Stain (Cerco	ospora kikuch	ii (T. Matsu. &	Tomoyasu	ı) Gard	lener)				
0	Rhizoctonia Root Rot (K	Rhizoctonia so	lani Kühn)					·		
Phyto	phthora Root Rot (Phytoph	uthora megas _l	perma Drechs. f.	. sp. glycin	ea (Ku	an & Erwin))			•
2	race 1 2 race	e 8	2 race 15	1 r	ace 22					
2	race 2 2 race	e 9	1 race 16	2 r	ace 23					
2	race 3 2 race	e 10	2 race 17	2 r	ace 24					
1	race 4 2 race	e 11	1 race 18	1 r.	ace 25		,			
1	race 5 1 race	e 12	1 race 19	2 r	ace 26					
2	race 6 2 race	e 13	1 race 20	2 0	ther (1	Please Speci	fy):			
2	race 7 1 race	e 14	2 race 21	_	Races	28, 29, 30,	32			
0	Bud Blight (Tobacco Rin	gspot Virus)	12 IO -	·	· .					
0	Yellow Mosaic (Bean Ye	llow Mosaic				· .				
0	Cowpea Mosaic (Cowpea	Chlorotic V	irus)							
0	Pod Mottle (Bean Pod M	ottle Virus)								

0 = Not Tested

1 = Susceptible

2 = Resistant 3 = Tolerant

B. DISEASE REACTIONS (Continued)

B. DISEASE REACTIONS (Continued)	0 = Not Tested	1 = Susceptible	2 = 0.3 Resistant	$\mathcal{G}_{=}$ Tolerant				
0 Seed Mottle (Soybean Mosaic Vi	rus)							
Nematode								
Soybean Cyst Nematode (Heterodera glyc	ines Ichinohe)			÷				
0 race 1 0 race 4	0 race	9						
0 race 2 0 race 5	0 race	14 (former r. 4)						
2 race 3 0 race 6	Othe	er (Please Specify)						
0 Lance Nematode (Hoplolaimus co	olumbus Sher)							
0 Southern Root Knot Nematode (A	Meloidogyne incognita	(Kofoid & White) Ch	itwood)					
0 Northern Root Knot Nematode (A	Meloidogyne hapla Ch	itwood)						
0 Peanut Root Knot Nematode (Me	Peanut Root Knot Nematode (Meloidogyne arenaria (Neal) Chitwood)							
0 Reniform Nematode (Rotylenchus	reniformus Linwood	& Olivera)						
0 Javanese Nematode (Meloidogyne	javanica (Treub) Chi	twood)						
Javanese Nematode (Meloidogyne Other Nematode (Please Specify)	javanica (Treub) Chi	twood)						
	javanica (Treub) Chi 0 = Not Tested	twood) 1 = Susceptible	2 = Resistant	3 = Tolerant				
Other Nematode (Please Specify)	0 = Not Tested		2 = Resistant	3 = Tolerant				
Other Nematode (Please Specify) C. PHYSIOLOGICAL RESPONSES	0 = Not Tested		2 = Resistant	3 = Tolerant				
Other Nematode (Please Specify) C. PHYSIOLOGICAL RESPONSES 3 Iron Chlorosis on Calcareous Soil	0 = Not Tested		2 = Resistant	3 = Tolerant				
Other Nematode (Please Specify) C. PHYSIOLOGICAL RESPONSES 3 Iron Chlorosis on Calcareous Soil 0 Phosphorus	0 = Not Tested		2 = Resistant	3 = Tolerant				
Other Nematode (Please Specify) C. PHYSIOLOGICAL RESPONSES 3 Iron Chlorosis on Calcareous Soil 0 Phosphorus 0 Boron	0 = Not Tested		2 = Resistant	3 = Tolerant				
Other Nematode (Please Specify) C. PHYSIOLOGICAL RESPONSES 3 Iron Chlorosis on Calcareous Soil 0 Phosphorus 0 Boron 0 Aluminum	0 = Not Tested		2 = Resistant	3 = Tolerant				

D. INSECT REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resistant 3 = Tolerant
0 Mexican Bean Beetle (Epilachna	varivestis Mulsant)		200300118
Potato Leaf Hopper (Empoasca f	abae (Harris))	*	
Other (Please Specify)			
E. HERBICIDE REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resistant
2 Metribuzin			
0 Bentazone			
1 Sulfonylurea			
2 Glyphosate		,	
1 Glufosinate			V
0 Pendimethalin			t.
Other (Please Specify)			
F. TRANSGENIC COMPOSITION		1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
Has the development of the Subject Variet If yes, please complete the following informal. Please state the vector's name:			
 Please state the vector components: Please describe the genetic material su Please describe the insertion protocol: 	-	into the Subject Var	iety:
* A literature citation(s) explaining the the "Transgenic Composition" portion		ests above may be an	acceptable alternative to completion of
II S Potent No. 5 776 760 Leggs Date:	[vdv: 7 1000 Lancau, 4	na Pomus. Commi	d Vichono Concello Assistante
U.S. Patent No. 5,776,760. Issue Date: J Monsanto Company. Patent Application		r: darry, Gerard, an	u kishore, Ganesn. Assignee:
ABSTRACT: Genes encoding a glyphosat	e oxidoreductase enzyr	ne are disclosed. Th	e genes are useful in producing

S&T-470-2 (2-99) designed by the Plant Variety Protection Office with MS Word97. Replaces LPGS-470-2 (6-83) which is obsolete.

herbicide.

transformed bacteria and plants which degrade glyphosate herbicide as well as crop plants which are tolerant to glyphosate

G. BIOCHEMICAL MARKERS

Please describe any biochemical information here which you believe will be helpful in further describing the Subject Variety (e.g. Simple Sequence Repeats, Restriction Fragment Length Polymorphisms, Isozymic Characterization). Use additional pages if necessary.

H. COMMENTS

MONSANTO TECHNOLGY LLC PVP APPLICATION - SN74232

EXHIBIT D

ADDITIONAL DESCRIPTION OF INVENTION

SN74232 is a mid maturity group II variety with resistance to Roundup tm herbicide. It has very high yield potential. It has superior yields to lines of similar maturity and has excellent agronomic characteristics, including lodging resistance. In tests, it has beaten Pioneer 92B62N by 107 % overall, winning at 17 of 29 locations. It is adapted to the mid maturity group II growing areas of South Dakota, Minnesota, Iowa, Michigan, Ontario, Nebraska, Illinois, and Wisconsin. It has only slightly above average appearance.

REPRODUCE LOCALLY. Include form number and edition date on all reproduc	ctions.	FORM APPROVED - OMB No. 0581-0055
U.S. DEPARTMENT OF AGRICULTURE		
AGRICULTURAL MARKETING SERVICE	Application is required in order to det	
	certificate is to be issued (7 U.S.C. 2 confidential until the certificate is issued.	
EXHIBIT E	Community the Certificate is issu	ded (7 0.3.0. 2420).
STATEMENT OF THE BASIS OF OWNERSHIP		
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION	3. VARIETY NAME
	OR EXPERIMENTAL NUMBER	
Monsanto Technology LLC	CAK2701F0R	SN74232
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)
634 E. Lincoln Way	(515) 232-7170	(515) 232-6905
Ames, IA 50010	(015) 252 1110	(515) 252 5565
711105, 111 50010	7. PVPO NUMBER	
	_	
	200300) 1 1 8
8. Does the applicant own all rights to the variety? Mark an "X" in t		
	•	x
TANKE I THE TANKE		
9. Is the applicant (individual or company) a U.S. National or a U.S	based company? If no, give name of	· I I I I I
		X
10. Is the applicant the original owner?	NO If no, please answer one o	f the following:
x 125	in no, please answer <u>one</u> o	t the following.
 a. If the original rights to variety were owned by individual(s), is 	s (are) the original owner(s) a U.S. Nation	nal(s)?
YES	NO If no, give name of country	У
b. If the original rights to variety were owned by a company(ies	s) is (are) the original owner(s) a H.S. ha	sed company?
YES [NO If no, give name of country	
	• • • • • • • • • • • • • • • • • • • •	•
11. Additional explanation on ownership (If needed, use the reverse	o for extra space):	•
		•
PLEASE NOTE:		
Plant variety protection can only be afforded to the owners (not licen	2000) who most the following criteria.	
riant variety protection can only be another to the owners (not licen	isees) who meet the following criteria:	
1. If the rights to the variety are owned by the original breeder, that p	person must be a U.S. national, national	of a UPOV member country, or
national of a country which affords similar protection to nationals		
2. If the rights to the variety are owned by the company which emplo	oyed the original breeder(s), the compan	y must be U.S. based, owned by
nationals of a UPOV member country, or owned by nationals of a	country which affords similar protection	to nationals of the U.S. for the same
genus and species.		
3. If the applicant is an owner who is not the original owner, both the	original owner and the applicant must n	teet one of the shove criteria
The same and the same and the same and the same and	onginal owner and the applicant most h	lest one of the above chiena.
The original breeder/owner may be the individual or company who d	irected the final breeding. See Section 4	11(a)(2) of the Plant Variety Protection
Act for definitions.		
ccording to the Paperwork Reduction Act of 1995, an agency may no conduct or sponsor, ontrol number. The valid OMB control number for this information collection is 0581-0055	and a person is not required to respond to a collection. The time partitined to complete this information collection.	on of information unless it displays a valid OMB
esponse, including the time for reviewing the instructions, searching existing data sources	s, gathering and maintaining the data needed, and con	opleting and reviewing the collection of information.
he U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs on the	he basis of race, color, national origin, gender, religio	n, age, disability, political beliefs, sexual orientation
and marital or familial status. (Not all prohibited bases apply to all programs). Persons with	ne casis un ace, color, national origin, gender, religion n disabilities who require alternative means for commu	ii, age, disability, political beliefs, sexual orientation, inication of program information (braille, large print,

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.